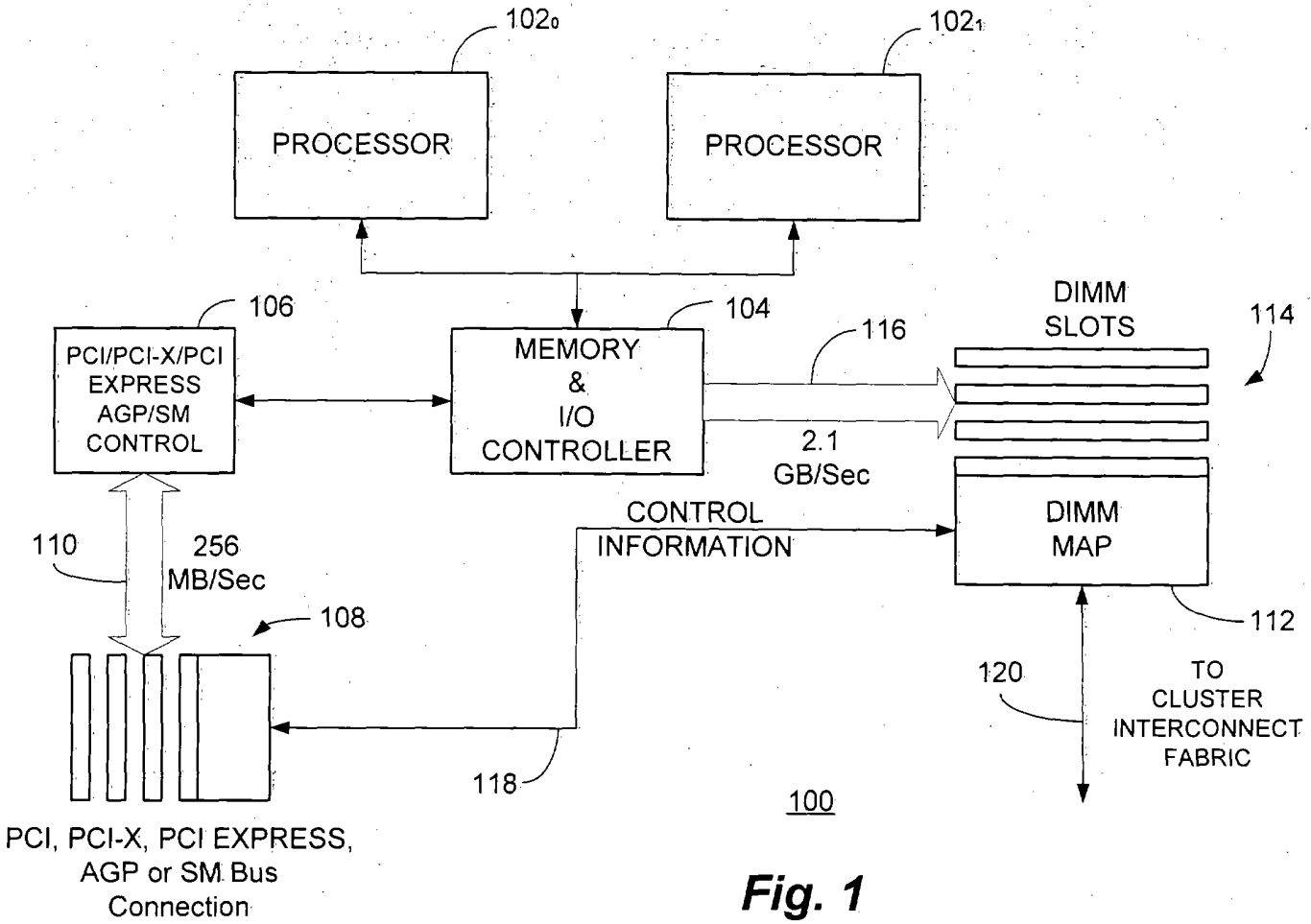
102_0
102_1
PROCESSOR
PROCESSOR
106
104
116
DIMM
SLOTS
114
PCI/PCI-X/PCI
EXPRESS
AGP/SM
CONTROL
MEMORY
&
I/O
CONTROLLER
2.1
GB/Sec
CONTROL
INFORMATION
DIMM
MAP
110
256
MB/Sec
108
112
120
TO
CLUSTER
INTERCONNECT
FABRIC
118
100
PCI, PCI-X, PCI EXPRESS,
AGP or SM Bus
Connection

Fig. 1

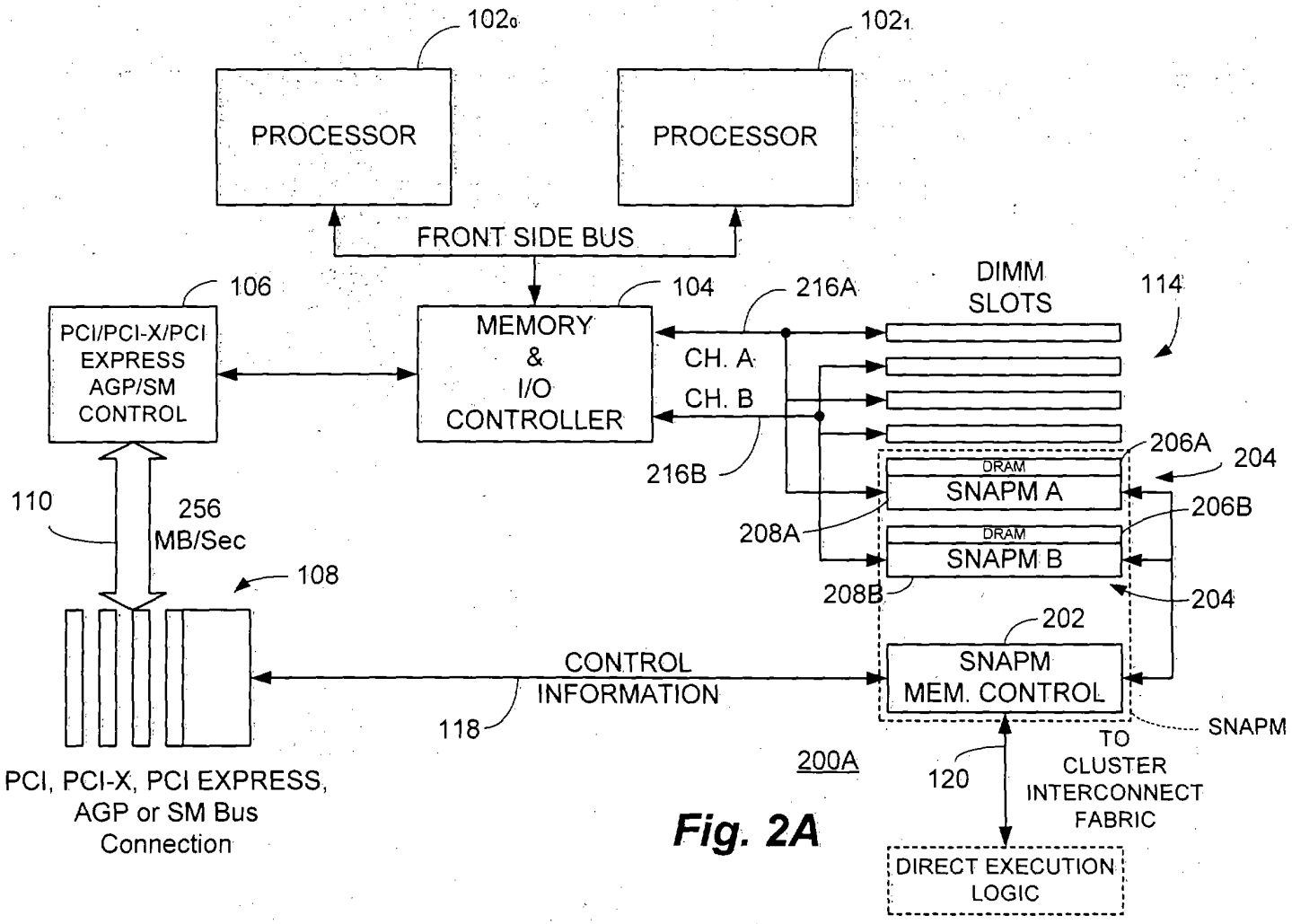
102₀
102₁
PROCESSOR
PROCESSOR
FRONT SIDE BUS
106
104
216A
DIMM SLOTS
114
PCI/PCI-X/PCI EXPRESS AGP/SM CONTROL
MEMORY & I/O CONTROLLER
CH. A
CH. B
216B
206A
204
DRAM
SNAPM A
206B
208A
DRAM
SNAPM B
208B
204
110
256 MB/Sec
108
202
SNAPM MEM. CONTROL
CONTROL INFORMATION
118
SNAPM
TO CLUSTER INTERCONNECT FABRIC
200A
120
DIRECT EXECUTION LOGIC
PCI, PCI-X, PCI EXPRESS, AGP or SM Bus Connection

Fig. 2A

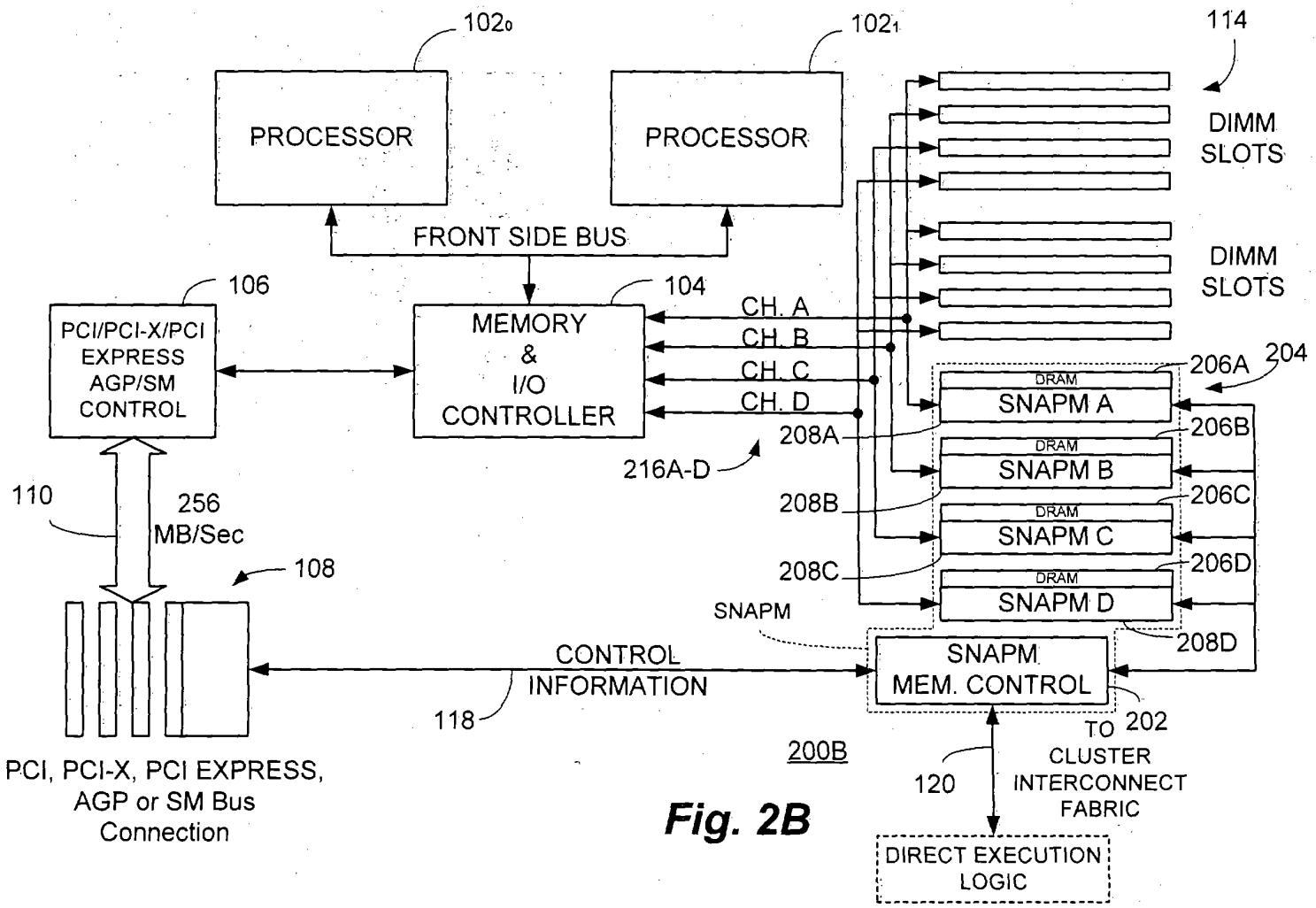
102_0
102_1
114
PROCESSOR
PROCESSOR
DIMM SLOTS
DIMM SLOTS
FRONT SIDE BUS
106
104
PCI/PCI-X/PCI EXPRESS AGP/SM CONTROL
MEMORY & I/O CONTROLLER
CH. A
CH. B
CH. C
CH. D
204
206A
DRAM
SNAPM A
206B
DRAM
SNAPM B
206C
DRAM
SNAPM C
206D
DRAM
SNAPM D
208A
208B
208C
208D
216A-D
110
256 MB/Sec
108
SNAPM
SNAPM MEM. CONTROL
CONTROL INFORMATION
118
TO 202
CLUSTER INTERCONNECT FABRIC
120
200B
DIRECT EXECUTION LOGIC
PCI, PCI-X, PCI EXPRESS, AGP or SM Bus Connection

Fig. 2B

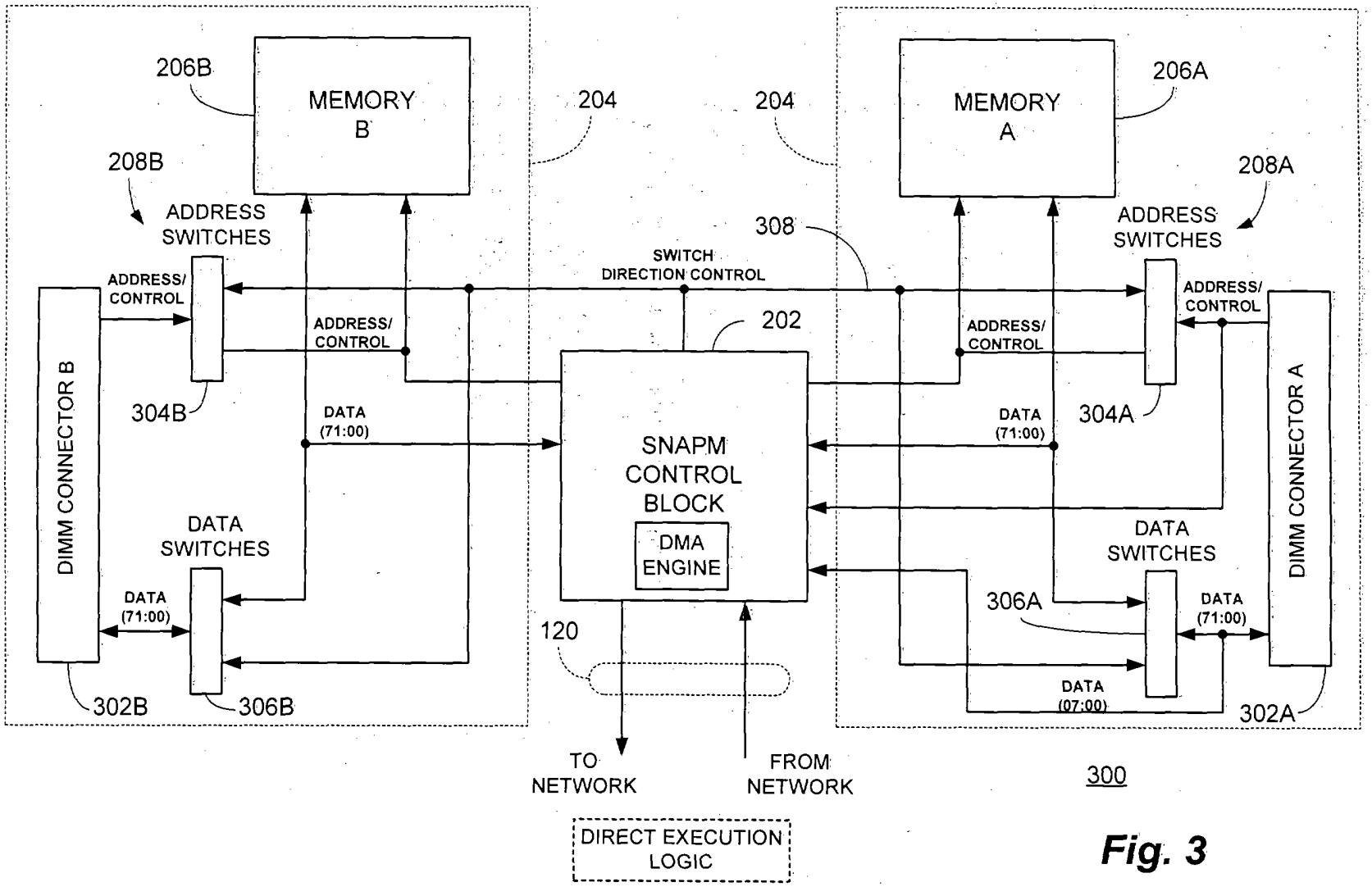
206B
MEMORY B
204
204
MEMORY A
206A
208B
ADDRESS SWITCHES
308
SWITCH DIRECTION CONTROL
ADDRESS SWITCHES
208A
ADDRESS/ CONTROL
ADDRESS/ CONTROL
ADDRESS/ CONTROL
ADDRESS/ CONTROL
202
DIMM CONNECTOR B
304B
DATA (71:00)
DATA (71:00)
304A
DIMM CONNECTOR A
SNAPM CONTROL BLOCK
DMA ENGINE
DATA SWITCHES
DATA SWITCHES
DATA (71:00)
306A
DATA (71:00)
120
DATA (07:00)
302B
306B
302A
TO NETWORK
FROM NETWORK
300
DIRECT EXECUTION LOGIC

Fig. 3

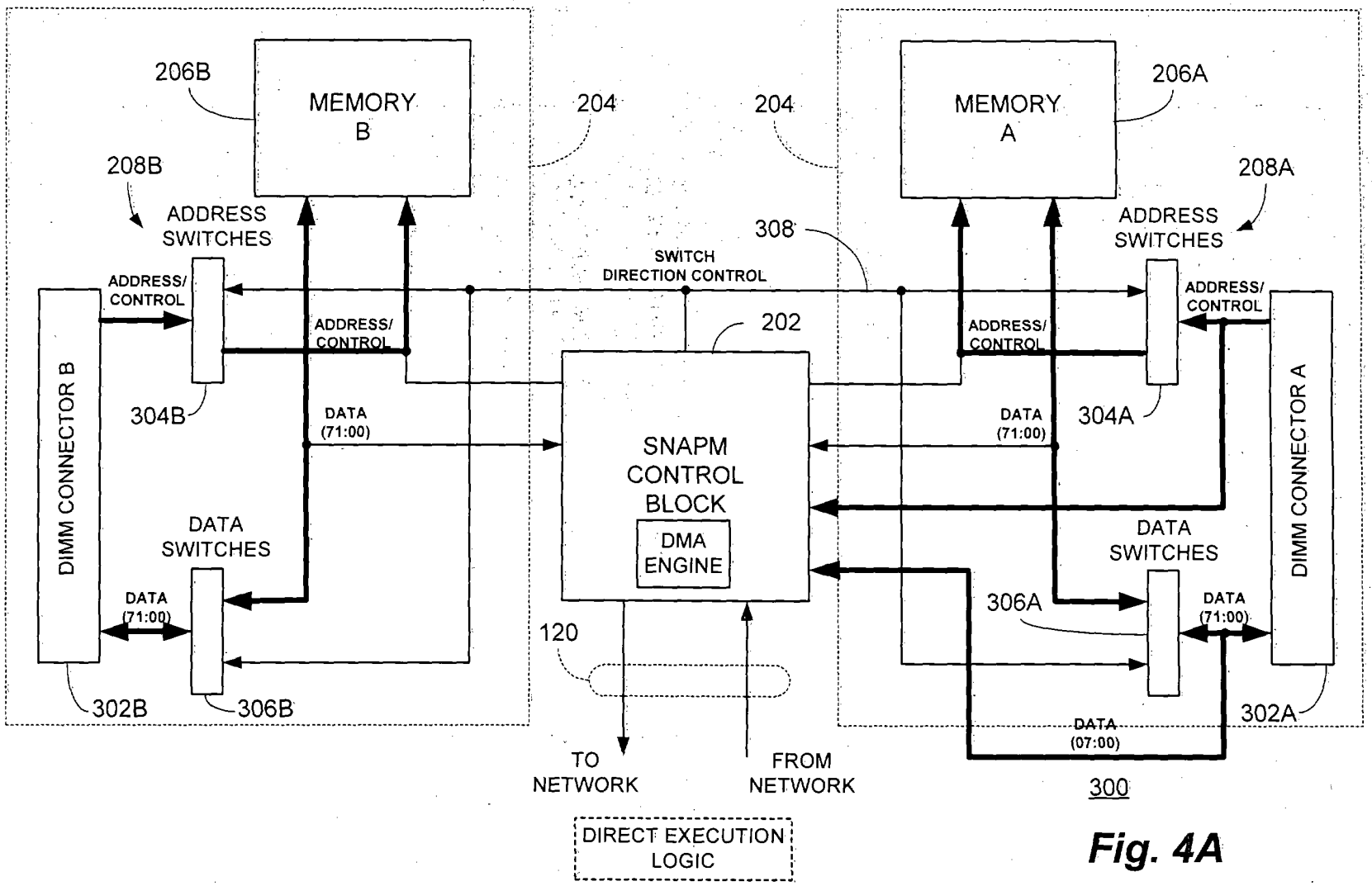
206B
MEMORY B
204
204
MEMORY A
206A
208B
ADDRESS SWITCHES
308
SWITCH DIRECTION CONTROL
ADDRESS SWITCHES
208A
ADDRESS/ CONTROL
ADDRESS/ CONTROL
202
ADDRESS/ CONTROL
ADDRESS/ CONTROL
DIMM CONNECTOR B
304B
DATA (71:00)
SNAPM CONTROL BLOCK
DMA ENGINE
DATA (71:00)
304A
DIMM CONNECTOR A
DATA SWITCHES
DATA SWITCHES
DATA (71:00)
306A
DATA (71:00)
120
302B
306B
302A
DATA (07:00)
TO NETWORK
FROM NETWORK
300
DIRECT EXECUTION LOGIC

Fig. 4A

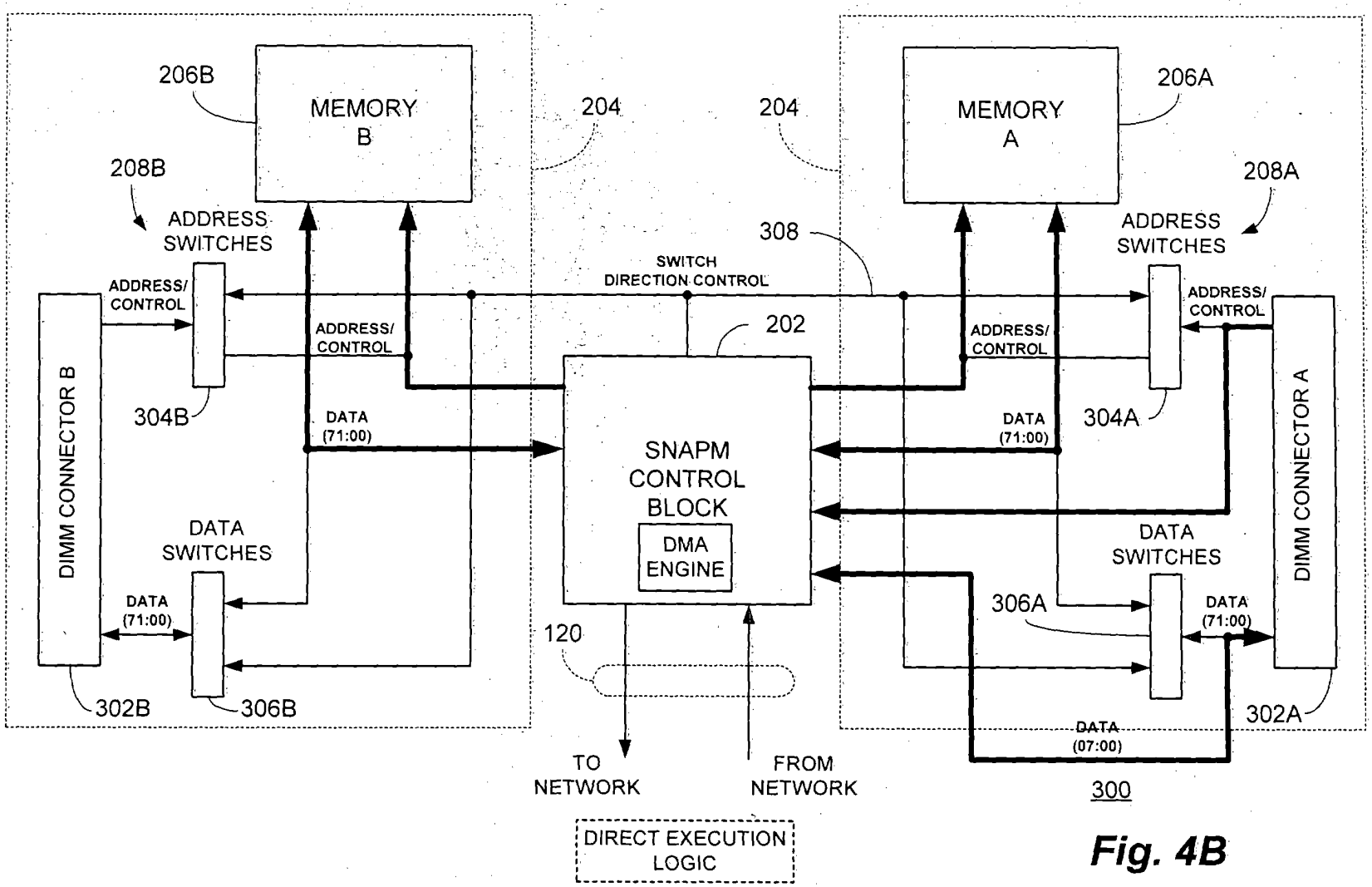
206B
MEMORY B
204
204
MEMORY A
206A
208B
ADDRESS SWITCHES
308
SWITCH DIRECTION CONTROL
ADDRESS SWITCHES
208A
ADDRESS/ CONTROL
ADDRESS/ CONTROL
202
ADDRESS/ CONTROL
ADDRESS/ CONTROL
DIMM CONNECTOR B
304B
DATA (71:00)
SNAPM CONTROL BLOCK
DMA ENGINE
DATA (71:00)
304A
DIMM CONNECTOR A
DATA SWITCHES
DATA SWITCHES
DATA (71:00)
306A
DATA (71:00)
120
302B
306B
302A
DATA (07:00)
TO NETWORK
FROM NETWORK
300
DIRECT EXECUTION LOGIC

Fig. 4B